# NIH COVID-19 Impact on Extramural Institutions Survey Survey Implementation Guide

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Prepared for the NIH Chief Officer for Scientific Workforce Diversity

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#### **NIH COVID-19 Impact on Extramural Institutions Survey**

#### **Survey Implementation Guide**

This document describes the measures used in the 2020 National Institutes of Health (NIH) COVID-19 Impact on Extramural Institutions Survey. The survey was fielded to 706 research leaders (VP of Research or equivalent) at the top 1,000 NIH-funded institutions between October 7 and November 6, 2020, and received a total of 224 responses for a 32% response rate.

During the survey, respondents were asked about the status of research operations at their institutions, financial concerns their institutions face, impacts on the research workforce and research productivity, as well as mitigation plans their institutions have implemented to support researchers and facility reopening. When possible, survey measures were based on validated survey items or scales. However, some measures were modified or revised based on the target population and the survey goals.

Prior to fielding, selected questions from the NIH COVID-19 Impact on Extramural Institutions Survey underwent cognitive testing with 9 research leaders to test understanding of survey items and identify areas for improvement. Pilot testing of the questionnaire was then conducted with 12 additional research leaders. Survey items were revised based on cognitive testing and pilot testing feedback prior to fielding the survey with all research leaders beginning October 2020.

#### **How to Use this Document**

All survey measures are presented in this document in the order and format they were administered to respondents when the survey was fielded in 2020. The survey has been annotated to support its use by other institutions and to convey key lessons learned. The following comment types are used throughout this document:

**Administration Note:** These notes describe survey language, measures, or administration techniques that may be specific to NIH and therefore may change when the survey is implemented at other institutions.

**Opportunity for Improvement:** These notes describe lessons learned from the administration process and suggest improvements for future implementation of the survey both at NIH and elsewhere.

## **Additional Formatting Notes:**

The types of survey questions are categorized below:

- o Multiple choice questions with response options that are mutually exclusive (i.e., respondents must select only one response option).
- ☐ Multiple choice questions with response options that are not mutually exclusive (i.e., respondents can select more than one response option).
- Questions with a free text response option.

Survey logic text is in blue and enclosed in bracket notation.

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# Section 1: Survey Information NIH COVID-19 Impact on Extramural Institutions Institutional-Level Ouestionnaire

#### The NIH COVID-19 Impact on Extramural Institutions Survey

**Administration Note:** Throughout the survey, a number of components may be revised on an institution-specific basis. These include:

- Survey name and institution/organization administering the survey
- Contact information and key institutional resources for those seeking assistance
- Main sections and timeframes for specific questions
- Adding or removing questions/answer choices as necessary

Thank you for participating in the NIH COVID-19 Impact on Extramural Institutions Survey. Administered by NIH's Office of Scientific Workforce Diversity, results from the survey will help NIH leadership understand how NIH-funded institutions have been affected by the COVID-19 pandemic and inform NIH policies and programs.

Before beginning, please review the important information below and hit "I agree" at the bottom of this page.

Confidentiality: Your responses to the survey are confidential and anonymous. An independent outside entity has been contracted by the NIH to distribute the survey, collect responses, and present survey findings back to NIH in groups no smaller than 5.

#### **Before You Begin**

- Taking the survey is voluntary. You may opt out at any time by closing the webpage.
- For your responses to be assessed, you will need to click the "submit" button on the last page of the survey.
- You do not need to answer all the questions to submit your responses.

#### Contacts:

For general questions or technical issues about how to complete the survey, please email [insert email of contact person]. If you'd like to learn more about the survey background and objectives, please email the NIH Scientific Workforce Diversity Office at <a href="https://www.workforce.org/workforce">workClimate@od.nih.gov</a>.

**Administration Note:** For future survey iterations, survey closing dates may need to be adjusted depending on the target response rate or other circumstances.

You can take this survey at your convenience on your mobile device or computer. We need a strong response rate to understand how we can address challenges posed by the COVID-19 pandemic. The survey will close on **October 23, 2020**.

#### Thank you!

By clicking "I agree" below, you are consenting to participate in this survey and are confirming that you are 18 years of age or older.

- o I agree to participate in this survey
- o I do not agree to participate in this survey [END SURVEY]

#### Section 2: Organization and Role

- Q1. Which of the following best describes your institution?
  - O Doctorate-granting university with a professional school (e.g., medical, pharmacy, veterinary, dental)
  - o Doctorate-granting university without a professional school (e.g., medical, pharmacy, veterinary, dental)
  - o Master's college/university
  - o Baccalaureate college/university
  - o Associate's college/community college
  - o Independent research institute or organization (please specify)
  - o Special focus institution (e.g., technology, arts-related, cancer center) (please specify)
  - o Other (please specify)

Q1a. Which state/territory is your institution located in?

[Drop-down list of 59 states and territories]

**Opportunity for Improvement:** To provide anonymity, survey respondents were not asked to provide the name of the institution they lead research at. This may not be relevant if multiple respondents per institution partake in the survey. For future survey iterations, this data may be worth collecting to facilitate more in-depth analysis. Survey respondents may either be given the option to write in the name of their institution or be provided with a personalized link to gather this data as an external field.

	isplay if Q1 \neq Independent research institute or organization] Does your institution consider itself
	be a Minority Serving Institution (MSI)?
_	Yes
0	No
-	isplay if Q2 = Yes, a minority serving institution] Does your institution consider itself to be one or
mo	ore of the following? Please select all that apply.
	Historically Black College or University (HBCU)
	Primarily Black Institution (PBI)
	Hispanic-Serving Institution (HSI)
	Tribal College or University (TCU)
	Native American Non-Tribal Institution (NANTI)
	Alaskan Native or Native Hawaiian-Serving Institution (ANNHI)
	Asian American and Native American Pacific Islander-Serving Institution (AANAPISI)
	Other (please specify)

- Q4. Is your title/role related to research oversight?
  - o Yes
  - o No

Q4a. [Display if Q4 = No OR unanswered] This survey is intended for those in roles that oversee research. Please indicate below if you would like to participate in the survey.  O I would like to participate in this survey  O I would not like to participate in this survey [END SURVEY]
Q5. [Display if Q4 = Yes] What is your title/role?  Calc Executive Vice President for Research Vice President for Research Vice Provost for Research Vice Dean for Research Vice Chancellor for Research Senior Associate Dean for Research Associate Dean for Research Associate Provost for Research Chief Scientific Officer Chief Medical Officer Center Director Other (please specify)
Opportunity for Improvement: List of answer choices was extensive to account for various different leadership titles. An alternative approach would be to display different titles depending on the type of institution selected. This approach would combat respondent fatigue.  Q6. Which NIH-related science areas are the largest recipients of NIH funding at your institution? Please select up to three choices.  Biological Sciences  Data Sciences  Dentistry  Education  Engineering/Technology  Health Sciences/Medicine  Interdisciplinary  Mathematical/Computational Sciences  Nursing  Pharmacy  Physical Sciences  Public Health  Social and Behavioral Sciences  Veterinary Medicine  Other (please specify)

#### **Section 3: Institutional Operations Related to COVID-19**

The following questions ask about research activities at your institution. **Research activities** include sponsored and non-sponsored research.

- Q7. Thinking about the last 30 days, what has been the status of your institution concerning on-site researchers and research activities as a result of COVID-19?
  - Our institution has been open at full or close-to-full capacity to all on-site researchers and research activities
  - Our institution has been open at **reduced capacity** to **all** on-site researchers and research activities
  - Our institution has been open at full or close-to-full capacity for some researchers and reduced capacity for others
  - Our institution has been open at **reduced capacity** for **some** on-site researchers and research activities, with other research continuing to take place remotely/off-site
  - Our institution has been **completely closed** to on-site researchers/research activities, but research continues to take place remotely/off-site

**Administration Note:** The time frame for certain questions was important for this survey due to the evolving nature institutional responses to the pandemic. The relevant time frames may vary depending on the goals of the survey.

Q8.	-	splay if $Q7 \neq Our$ institution has been completely closed] Has your institution implemented any ety measures to protect the health of researchers and research support staff?
	0	Yes
	0	No
<b>Q</b> 9.		nich of the following factors resulting from COVID-19 have had the <i>most negative impact</i> on your
	inst	citution's research function? Please select up to three choices. [RANDOM ROTATE]
		Inadequate communication with leadership
		Increased virtual meetings
		Shift from in-person to online classrooms
		Increased administrative responsibilities
		Faculty/staff layoffs
		Furloughs due to institutional budget cuts
		Institutional hiring freezes
		Concerns about enrollment numbers
		Visa considerations
		Individuals testing positive for COVID-19
		Fatalities due to COVID-19
		Insufficient access to personal protective equipment (e.g., masks, industrial-grade sanitizing
		products, hand sanitizers, or other products)
		Lack of COVID-19 testing resources (e.g., availability of testing sites, places to analyze tests,

resources to conduct tests)

☐ Other (please specify)

☐ Reduced access to on-site laboratories☐ Increased faculty teaching requirements

□ None of the above [	<b>EXCLUSIVE</b>
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**Opportunity for Improvement:** Answer choices were comprehensive to account for various factors impacting research, but may have been tedious for respondents to read through. One way to reduce the number of answer choices would be to utilize factor analysis to identify answer choices that are highly correlated and select the choice with the highest loading.

#### **Section 4. Financial Concerns**

Q10. How concerned are you about the impact of COVID-19 on the financial status of your institution?

- o Extremely concerned
- o Very concerned
- o Moderately concerned
- o Slightly concerned
- Not at all concerned

Q11. Based on what you know now, how likely is it that the financial repercussions of COVID-19 will jeopardize your institution's ability to maintain its research function?

- Extremely likely
- o Likely
- o Neutral
- o Unlikely
- o Extremely unlikely

Q12. T	hinking about the institution where you oversee research, which, if any, of the following factors
has	s had a substantial impact on your institution as a result of COVID-19? Please select all that apply
[R]	ANDOM ROTATE]
	Unexpected costs associated with increased spending on technology to facilitate remote work
	Decrease in philanthropic revenue sources (e.g., non-governmental revenue from fundraising,
	private foundation grants)
	Loss of endowment funding or capital market programs
	Loss of revenue from athletics
	Loss of revenue from activities (e.g., camps, summer programs, daycare)
	Loss of housing and dining revenue with students leaving campus earlier than planned
	Unexpected costs associated with staff and students moving off campus
	Reduction in tuition revenue from students
	Increased expenses involved with ensuring safety of staff and students (e.g., cleaning, testing,
	extra housing space for quarantining)
	Loss of state funding
	Other (please specify)
	None of the above [EXCLUSIVE]

**Administration Note:** For questions with long lists of answer choices, we programmed the survey to randomly rotate the order of choices for each respondent in order to minimize ordering effects.

# Section 5. Impact on the Workforce

Q13. W	Thich, if any, of the below have happened at your institution due to COVID-19? Please select all
tha	t apply. [RANDOM ROTATE]
	Salary cuts
	Budget cuts
	Furloughs
	Terminations
	Reduced hours
	Loss of grants, endowments, or sponsorships
	Loss of tuition and revenue
	Freezes in hiring
	Revocation of approved job offers
	Reductions in travel
	Cancellation of programs
	Offerings of early retirement
	Loss of daycare
	Delay in promotion timelines
	Other (please specify)
	None of the above [EXCLUSIVE]

How much of a priority do you consider the following practices to be in restoring research operations?

	Not a priority 1	Low priority 2	Medium priority 3	High priority 4	Essential 5
Q14. Maintaining a healthy environment	0	0	0	0	0
through the cleaning and disinfecting					
of facilities					
Q15. Implementing a COVID-19 testing	0	0	0	0	0
program to protect the research					
workforce					
Q16. Developing and implementing	0	0	0	0	0
phased plans to return to the					
workplace safely					
Q17. Maintaining financial sustainability	0	0	0	0	0
considering budgetary restrictions and					
challenges					
Q18. Preventing workforce layoffs and	0	0	0	0	0
furloughs					
Q19. Promoting research that can be	0	0	0	0	0
conducted remotely					
Q20. Addressing the specific needs of	0	0	0	0	0
research that can only be done on-site					
Q21. Complying with operational and	0	0	0	0	0
reporting requirements of grant-					
funding					

#### **Section 6. Research Productivity**

- Q22. Since the transition to maximized remote work at your institution, how much has COVID-19 impacted overall research productivity, including research activities and outcomes?
  - No impact
  - Minor impact
  - Moderate impact
  - Major impact
  - Don't know yet

**Areas for Improvement:** Certain questions may seem to require further research/data-gathering on the respondent's part. To minimize respondent burden, future administration of the survey should make clear that the survey is intended to gather general impressions and not inventory institutional responses. It does not require additional, external research.

If the goal of the survey is not to gather opinions but rather inventory institutional responses, then this requirement ought to be made clear, and the respondent should have the option to exit and return to the survey as needed.

In your opinion, what has been the impact of COVID-19 on the following research activities at your institution?

	Strong negative impact	Negative impact	Neutral	Positive impact	Strong positive impact	N/A
Q23. Publishing journal articles, books, etc.	0	0	0	0	0	0
Q24. Research site/laboratory access for research deemed "noncritical" or "nonessential"	0	0	0	0	0	0
Q25. Research site/laboratory access for research deemed "critical" or "essential"	0	0	0	0	0	0
Q26. Grant application submissions	0	0	0	0	0	0
Q27. Grants awarded to the institution	0	0	0	0	0	0
Q28. Continuation of human (IRB) reviews	0	0	0	0	0	0
Q29. Continuation of animal (IACUC) reviews	0	0	0	0	0	0
Q30. Access to clinic/human research subjects	0	0	0	0	0	0
Q31. Access to experimental animals	0	0	0	0	0	0
Q32. COVID-19 vaccine development	0	0	0	0	0	0

	Strong negative impact	Negative impact	Neutral	Positive impact	Strong positive impact	N/A
Q33. Number of support staff on-	0	0	0	0	0	0
site						

Since transitioning to remote work, how has the workload in the following research areas changed?

since transitioning to remote worth,	Decreased a lot	Decreased some	No impact	Increased some	Increased a lot	Not sure
Q34. Wet lab research (e.g., drug, chemical, or biological-related)	0	0	0	0	0	0
Q35. Dry lab research	0	0	0	0	0	0
Q36. Clinical trials	0	0	0	0	0	0
Q37. Other clinical research (e.g., observational studies, cohort studies)	0	0	0	0	0	0
Q38. Behavioral and social sciences research (e.g., psychology experiments)	0	0	0	0	0	0
Q39. Writing and submitting peer-reviewed articles for publication	0	0	0	0	0	0
Q40. Writing and submitting book manuscripts, monographs, or conference proceedings for publication	0	0	0	0	0	0
Q41. Writing grant proposals	0	0	0	0	0	0
Q42. Collecting data	0	0	0	0	0	0
Q43. Analyzing data	0	0	0	0	0	0
Q44. Supervising laboratory staff	0	0	0	0	0	0
Q45. Presenting research findings	0	0	0	0	0	0
Q46. Collaborating with colleagues	0	0	0	0	0	0

Q47. If applicable, do you believe that COVID-19 will negatively affect the ability to earn **tenure** at your current institution?

- O Yes, it will make it harder to achieve tenure
- o No, it will not make it harder to achieve tenure
- o Not sure
- o N/A

Q48. [Display if Q47 = Yes] You mentioned that COVID-19 may affect the ability of faculty to earn tenure. Which of the following statements is closest to your view?

- o Accommodations are in place to account for lost research time
- o We have not yet put accommodations into place, but we are planning on doing so

0	We have not and are not planning to put accommodations in place
	Fapplicable, do you believe that COVID-19 will negatively affect the ability of researchers/facult earn <b>promotions</b> at your current institution?
0	Yes, it will make it harder to achieve promotions
	No, it will not make it harder to achieve promotions
0	Not sure
0	N/A
Q50. A	are researchers at the institution you oversee engaged in research aimed at understanding,
	eventing, or treating COVID-19?
0	Yes
0	No
0	Not sure
0	N/A
rel o o	are researchers at the institution you oversee contributing to the literature on public health policy ated to COVID-19 (e.g., modeling and forecasting the impacts of public health interventions)?  Yes  No  Not sure
0	N/A
neg RC	Over the last 30 days, which of the following specialized research resources have been <i>most</i> **gatively impacted** by COVID-19 within your institution? Please select all that apply. [RANDOM DTATE]  Access to core facilities
	Access to laboratories  Access to clinic/hyman research subjects (e.g., in a clinical setting, in a community)
	Access to clinic/human research subjects (e.g., in a clinical setting, in a community) Access to animal care facilities
	Access to animal care facilities  Access to supplies/specimens (e.g., autoclave, thermocycler, DNA sequencing equipment, mass spectrometers, surgical instruments, tissue, blood, and live animals)
П	Access to team members/colleagues
_	Access to data
	Access to mentors
	Other (please specify)
	None of the above [EXCLUSIVE]
_	

## Section 7. Reopening Post-COVID/COVID-Related Policies

**Administration Note:** Some items in this section were developed in tandem with the NIH COVID-19 Impact on Extramural Researchers Survey with the goal of comparing assessments of how well the institution had managed the pandemic. Future iterations may also benefit from this approach.

Q53. Does your institution have a phased physical return plan for staff, faculty, and graduate students?
o Yes
o No
o Not sure
o N/A
Q54. Is COVID-19 testing available for staff, faculty members, and students (if applicable) at your
institution?
O Yes, anyone can get tested
<ul> <li>Yes, but only people who are symptomatic or who have had contact with someone who has COVID-19 can get tested</li> </ul>
o No
<ul> <li>Not yet, but in planning phase</li> </ul>
o Not sure
Q55. Are contact tracing, transmission modeling, and other monitoring measures being implemented at your institution?
o Yes
o No
o In planning phase
<ul> <li>Q56. Is there an organizational plan for reporting COVID-19 cases and emerging cases?</li> <li>Yes</li> <li>No</li> </ul>
o In planning phase
o in planning phase
Q57. In which of the following areas, if any, is your institution currently offering any COVID-19-related flexibilities for faculty/staff? Please select all that apply.  □ Telework
☐ Tenure-clock considerations
☐ Teaching hours
☐ Employment hours
☐ Other (please specify)
□ None of the above [EXCLUSIVE]
Q58. How effectively has your institution managed the logistical process of returning to physical
workplaces?
<ul> <li>Very effectively</li> </ul>
<ul> <li>Somewhat effectively</li> </ul>
<ul> <li>Not very effectively</li> </ul>
o Not effectively at all
Q59. To what extent do you agree or disagree with the following statement? My institution has provided
clear guidance about returning to the workplace.
o Strongly agree
ο Agree

o Neither agree nor disagree

- o Disagree
- Strongly disagree

**Opportunities for Improvement:** Future survey iterations may benefit from asking follow-up questions on how institutions can improve the effectiveness of managing the pandemic.

Q60. C	Of the following measures, please select those that your institution has established in response to the
CC	OVID-19 pandemic. Please select all that apply.
	A COVID-19 response team (addressing communications, responses, and/or processes for return
	to the physical workplace)
	Policies and procedures to secure adequate PPE and sanitation equipment for offices, classrooms
	and labs
	Procedures for people with disabilities to safely return to the physical workplace
	Procedures for people with a higher risk for severe illness from COVID-19 to safely return to the
	physical workplace
	Policies and procedures to conduct clinical and non-clinical, in-person research involving human
	subjects
	Reconfigurations (or assignments) of physical space to research groups to promote social
	distancing
	Policies and procedures in place for employees who do not feel comfortable with returning to the
	physical workplace
	Other (please specify)
	None of the above [EXCLUSIVE]

How difficult will the following measures be to implement as the institution reopens?

	Very difficult	Difficult	Somewhat difficult	Not difficult at all	N/A
Q61. Physical distancing	0	0	0	0	0
Q62. PPE and hand sanitizing provisions	0	0	0	0	0
Q63. Contact tracing and tracking	0	0	0	0	0
Q64. Communal dining restrictions	0	0	0	0	0
Q65. Campus and public transportation limitations	0	0	0	0	0
Q66. Safe dormitory facilities and occupancy	0	0	0	0	0
Q67. Custodial services and sanitizing of classrooms and laboratory spaces	0	0	0	0	0
Q68. Health care providers available for staff	0	0	0	0	0

- Q69. Some members of your faculty and staff may have household and caretaking responsibilities due to COVID-19. **Caretaking responsibilities** include childcare, schooling, elder person care, disabled care, and/or care for ill household and/or family members. Is the institution providing/expanding facilities for childcare/family care services to accommodate the care needs of research staff?
  - Yes
  - o No
  - o In planning phase
  - Don't know

#### **Section 8. Additional Feedback**

The NIH has created a webpage "COVID-19: Information for NIH Applicants and Recipients of NIH Funding" to share how NIH's applicant and recipient community may continue its research.

Q70. Are you aware of this NIH webpage?

- o Yes
- o No
- o Unsure
- Q71. [Display if Q70 = Yes] How helpful have you found the webpage "COVID-19: Information for NIH Applicants and Recipients of NIH Funding" in addressing your questions and concerns?
  - Very helpful
  - Somewhat helpful
  - o Neither helpful nor unhelpful
  - o Barely helpful
  - Not helpful at all

The survey is nearly done! The questions below seek your perspectives on two important matters. The findings from these questions will be used to inform NIH policy and program decisions.

Q72. Please share with us any thoughts you may have around the **impact of recent social unrest on research at your institution**.

Q73. Please provide **any additional feedback that you believe will be helpful to the NIH**, including suggestions on how the NIH can support your institution during this period.

# **Section 9. Demographics**

Q74. What is your age?				
0	18-24			
0	25-34			
0	35-44			
0	45-54			
0	55-64			
0	65-74			
0	75 or older			
0	Prefer not to answer			
Q75. W	What is your gender identity?			
0	Man			
0	Woman			
0	Transgender man			
0	Transgender woman			
0	Genderqueer or gender non-conforming			
0	Questioning			
0	Something else			
0	Prefer not to answer			
Q76. W	Which of the following do you consider yourself to be?			
0	Heterosexual or straight			
0	Lesbian, Gay, or Homosexual			
0	Bisexual			
0	Asexual			
0	Questioning			
0	Something else			
0	Prefer not to answer			
A 7				
	inistration Note: Gender and sexual orientation questions are sensitive topics for some			
_	ondents. Therefore, it is important for the answer choices to be thorough and phrased			
appro	opriately. Expert review is recommended.			
Demographic questions may be omitted or simplified based on the goals of the research.				
Q77. A	re you of Hispanic, Latino, or Spanish origin?			
0	Yes			
0	No			
0	Prefer not to answer			
Q78. W	Vith which race do you most identify? Please select all that apply.			
	White			
	Black or African American			
	American Indian or Alaska Native			
	Asian			

	Native Hawaiian or Pacific Islander					
	Other					
	☐ Prefer not to answer					
Q79. Do you have a disability?						
0	Yes					
0	No					
	Prefer not to answer					